ABSTRACT OF THE DISCLOSURE

Monoclonal antibodies which can bind to the ClfA protein and which are generated from binding subdomains or active fragments of the ClfA protein from *Staphylococcus aureus*, including the active fragments proteins from its fibrinogen binding domain such as Clf40 protein, the Clf33 protein, or ClfA N3, are provided which can be useful in the treatment and protection against infection from staphylococcal bacteria such as *Staphylococcus aureus*. In addition, medical instruments can be treated using the monoclonal antibodies of the invention in order to reduce or eliminate the possibility of their becoming infected or further spreading the infection. In particular, the antibodies of the present invention are advantageous because they can prevent adherence of the bacteria to host cells by impairing or inhibiting the ability of *S. aureus* ClfA to bind to fibrinogen or fibrin, and thus can be utilized in methods or treating or preventing staphylococcal inventions.